Quality Control

Work Orde												Page 1
Item ID: I Revision ID:	D3492-043			. A	Accept					Setup St		
Item Name:	Plug Assembly	<b>y</b>	ı							St	top	
	4/14/2011	Start Qty: 80.0				Cust Ite						
Required Date: 4 Reference:	4/27/2011	Req'd Qty: 80.0	00			Custom	er:					
Approvals:	Process Plan	n: CL	Date: _( /	104/14	Tooling:		Date:	_	]		art	
	QC:		Date:		<b>SPC (Y/N):</b>		Date:					
Sequence ID/ Work Center ID		Operation Description			Set Up/ Run Hours	Tool l	D Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revi	ision Nbr										
D3492	Rev	С										
100 Hardinge		Hardinge CNC LAT			0.00				80	Ø	<u> </u>	·
Hardinge CNC Lathe	Small	1-Turn a Rev:	s per Folio FA632	& Dwg D349	02: Dwg Rev: <u>C</u> NJ4/12 P					/	,	
110 		QC2- Inspect parts o	ff machine FAI/Fa		0.00				80	Ø		
Quality Control		Мето		12	11/4/22							
120		QC8- Inspect parts -	second check		0.00 0.00	11/04/28			80		<u>.                                    </u>	
QC		Memo			0.00							

# **Dart Aerospace Ltd**

W/O:				WORK OR	DER CHA	NGES		,	•		
DATE	STEP		PROCE	DURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
					i						
								-			
					•						
									<u></u>		
Part No	:	PAR	#:	Fault Category:		NC	<b>R:</b> Yes	No DQ	<b>A</b> :	Date: _	
	R	tesolution:		Disposition:		QA	: N/C C	losed:		Date: _	

NCR:	,	,	WORK ORD	ER NON-CONFORM	MANCE (NCR)		•	
<del></del>		Description of NC		Corrective Action Se	ection B	Verification	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
								,

NOTE: Date & initial all entries

<b>Work Ord</b> Thursday, April													Page 2	
Item ID: Revision ID: Item Name:	D3492-043 Plug Assembly			Ac	cept					Setup	Start Stop			
	4/14/2011 4/27/2011	Start Qty: 80.00 Req'd Qty: 80.00				Cust Item I Customer:	D:							
Approvals:	Process Plan	n:	Date:		Γooling: SPC (Y/N):		ate:			Run	Start Stop	, , , , , , , , , , , , , , , ,		
Sequence ID/ Work Center II  130  HandFinish Hand Finishing	<b>D</b> .	Operation Description Chemical Conversion Co Memo	at per QS1005	4.1	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty So	Qty L	I	Reject Number	Insp. Stamp	
Powder Coating	964	White Gloss(Ref:4.3.5.1)  Memo  (Flat End Or TEMPERAT	ılv)□START ´	i.	0.00 0.00 0.00 TIME:	=N/0-240			80	- J	<u>/</u> ,	ML	11/05/	0
150 QC Quality Control		QC3- Inspect Part Finish  Memo			0.00				80	) \$	ال	lil	35/04	

Dart Ae	rospace	Ltd								
W/O:			W	ORK ORDER CHAI	NGES					
DATE	STEP	PRO	OCEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No		PAR #: esolution:								
NOD.				DER NON-CONFOR	<u> </u>					-
NCR:		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			1	- (11011	<i>,</i>			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action  Action Description  Chief Eng	Section B	Sign & Date	Verifica Sectio		Approval Chief Eng	Approval QC Inspector
					İ					

NOTE: Date & initial all entries

Work Orde		<b>508</b> 21:13 AM											Page 3	_
Revision ID:	D3492-043 Plug Assembly	y		A	ccept				<b>      </b>	Setup	Start Stop			
	4/14/2011	<b>Start Qty:</b> 80.00 <b>Req'd Qty:</b> 80.00		1   1   1   1   1   1   1   1   1   1		Cust Item I Customer:	D:							
Approvals:	Process Pla	n:	Date: _		Tooling: SPC (Y/N):		ate:		Ì	Run	Start Stop			
Sequence ID/ Work Center ID  160 Packaging Packaging	)	Operation Description Identify as per dwg & Sto	ock Location	F-PB	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	
170 QC Quality Control		QC21- Final Inspection -	· Work Orde	r Release	0.00							u 16	43	

Ø111-05-9 GO

# **Dart Aerospace Ltd** WORK ORDER CHANGES W/O: Approval **Approval** STEP DATE PROCEDURE CHANGE Ву Qty Chief Eng / Prod Mgr Date QC Inspector Part No: PAR #: Fault Category: NCR: Yes No DQA: \_\_\_\_ Date: \_\_\_\_ Resolution: \_\_\_\_\_ Disposition: \_\_\_\_ QA: N/C Closed: \_\_\_\_ Date: \_\_\_\_ WORK ORDER NON-CONFORMANCE (NCR) NCR:

		Description of NC		Corrective Action	Section B		Verification	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description	on I	Sign & Date	Section C	Chief Eng	QC Inspector
į Ę									
	<u> </u>					•			
NOTE: D	ate & initia	al all entries	1	<u></u>	., ,	J		L	

### **Picklist Print**

Thursday, April 14, 2011 10:21:09 AM

Work Order ID: 68508

Parent Item:

D3492-043

Parent Item Name: Plug Assembly

6061-T6 Round Bar .750"



Start Date: 4/14/2011

Required Date: 4/27/2011

**Start Qty: 80.00** 

Required Qty: 80.00

**Comments:** 

IPP Rev: A 06.03.21 New Issue JLM

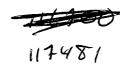
IPP Rev:B 06-08-28 As per Rev B JLM

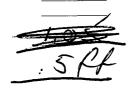
IPP Rev:C 07-12-06 Rev C dwg DD verified by:EC

IPP Rev:D 08-05-07 add note to count qty DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.750		Purchased	No			100	f	1.4130	0.0625	5.263158		4/2	2
										S 12	. (1)	7/20	

Location Loc Qty Loc Code 1.413 MAT013 112442 0.796 116406 0.617





Page 1

Dart Aeı	rospace	e Ltd							
W/O:			W	ORK ORDER CHA	NGES				
DATE	STEP	PRO	CEDURE CH	ANGE		Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
	1								
Part No	:	PAR #:	Fault Cat	tegory:	NCF	R: Yes N	o <b>DQA</b> :	Date: _	
	R	esolution:	Disposit	ion:	QA:	N/C Clos	sed:	Date: _	
NCR:		V	VORK ORI	DER NON-CONFOR	MANCE	(NCR)			
DATE	STEP	Description of NC Section A	Initial	Corrective Action Action Description	Section B	Sign &	Verification Section C	Approval Chief Eng	Approval QC Inspector
		Occilon A	Chief Eng	Chief Eng		Date	Occion O	Januar Eng	GO MOPOSION

NCR:		•	WORK ORD	ER NON-CONFOR	RMANCI	E (NCR)			
		Description of NC		Corrective Action	Section B		Verification	Annroval	Annroval
DATE	STEP	Section A	Initial Chief Eng	Action Descripti Chief Eng	on	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspecto
·									
							3		
				,					
						,			

NOTE: Date & initial all entries

-NAS1611 PLUG (SEE TABLE) D3492-XX PLUG (SEE TABLE)-

#### D3492-XXX PLUG PARTS LIST

QTY -041	-043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	PART NUMBER	DESCRIPTION
Х							D3492-041	PLUG ASSEMBLY
	Х						D3492-043	PLUG ASSEMBLY
		Х				7	D3492-045	PLUG ASSEMBLY
			X				D3492-047	PLUG ASSEMBLY
				Х		T	D3492-049	PLUG ASSEMBLY
					X		D3492-051	PLUG ASSEMBLY
						×	D3492-053	PLUG ASSEMBLY
- 1							D3492-1	PLUG
	1						D3492-3	PLUG
		1					D3492-5	PLUG .
			1				D3492-7	PLUG ***
				1			D3492-9	PLUG
					1		D3492-11	PLUG
						1	D3492-13	PLUG
		1					NAS1611-005	O-RING
			1				NAS1611-007	O-RING
1	1						NAS1611-010	O-RING
						1	NAS1611-012	O-RING
	1						NAS1611-013	O-RING
					1		NAS1611-015	O-RING
	1			1		- i	NAS1611-016	O-RING
		l		<u> </u>		_	1	L

NOTES: 1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX

DEO ATTACHED

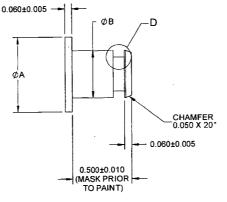
DESIGN	M.	au	DART AEDOS	DACEL	TD
REV.	DESCRIPTI	ON		BY	DATE
Α	NEW ISSUE	:		PH	06.01.04
B	ADD -047; L	JPCATE DIM A F	OR -045	PH	06.05.11
С	ADD -049/-0	051/-053, CHANG	GE DRAWING FORMAT	PH	07.10.05

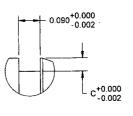
DESIGN	<i>f</i>	DART AERO	SPACE LTD	
DRAWN	PA4	HAWKESBURY, ONTARIO, CANADA		
CHECKED	, b	DRAWING NO.	REV. C	
MFG. APPR.	M O	D3492	SHEET 1 OF 2	
APPROVED	M	TITLE	SCALE	
DE APPR.	#	PLUG	2:1	
DATE 07.1	0.05	COPYRIGHT © 2007 BY C		

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-POWDER COAT THESE FACES ONLY PER NOTE 2

D





DETAIL D

#### D3492-XX PLUG

#### D3492-XX PLUG MACHINING DETAILS

P/N	Α	В	С	MATERIAL SPEC
D3492-1	0.625	0.394	0.055	M6061T6R0.625
D3492-3	0.750	0.582	0.045	M6061T6R0.750
D3492-5	0.375	0.188	0.045	M6061T6R0.375
D3492-7	0.500	0.270	0.045	M6061T6R0.500
D3492-9	0.938	0.750	0.045	M6061T6R1.000
D3492-11	0.850	0.664	0.045	M6061T6R0.875
D3492-13	0.750	0.520	0.045	M6061T6R0.750

DEO ATTACHED

NOTES:
1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100) (REF. DART MATERIAL SPEC M606116R0.000)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE GLOSS (4.3.5,1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX OF THE PROPERT OF THE PROPERTY OF TO THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF TO THE PROPERTY OF THE PR DART AEROSPACE LTD DESIGN HAWKESBURY, ONTARIO, CANADA DRAWN DRAWING NO. CHECKED D3492 MFG. APPR. APPROVED TITLE 6) IDENTIFICATION: N/A 7) WEIGHT: N/A **PLUG** DE APPR. COPYRIGHT © 2007 BY DART AEROSPACE LTD

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DATE

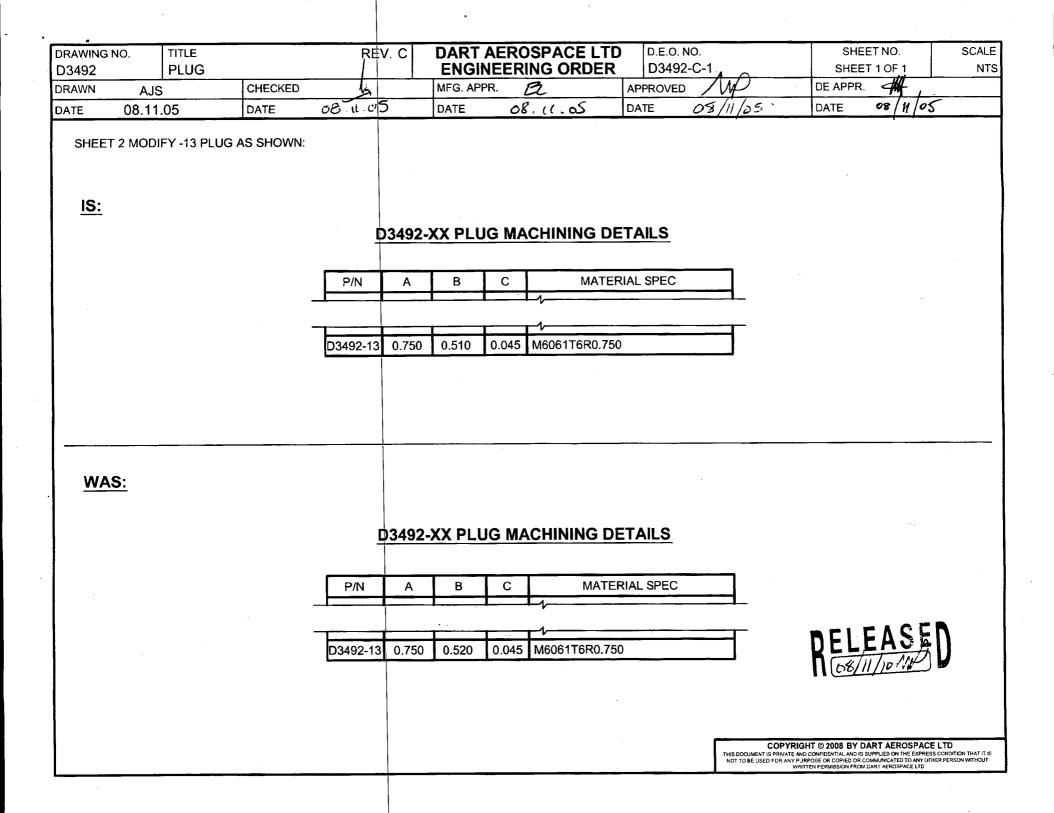
07.10.05

REV. C SHEET 2 OF 2

SCALE

4:1

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DART AEROSPACE LTD	Work Order:	68508
Description: Plug	Part Number:	D3492-3
Inspection Dwg: D3492 Rev: C		Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

		X	First Artic	le	Proto	type	
Drawing Dimension	Tolerance		Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.750	+/-0.010		Ø.745			3/29	
Ø0.582	+0.008/-0.001		6.581				
0.045	+0.000/-0.002	:	0.0445				
0.060	+/-0.005		.058				
0.060	+/=0:005		.058				
0.500	+/-0.010		. 560	/			
0.090	+0.000/-0.002	2	. 689				
	,						
		_					

	1			
Measured by:	17	Audited by:	Prototype Approval:	N/A
Date:	1114121	Date: 11/04/28	Date:	N/A

Rev	Date	Change	Revised by Approved
A	06.07.07	New Issue P/O D3492-043	KJ/JLM
B		Ø0.750 was Ø0.625	KJ/JLM ,
- <del>c</del>	08.09.04	Tolerance revised for Ø0.750	KJ/DD ox